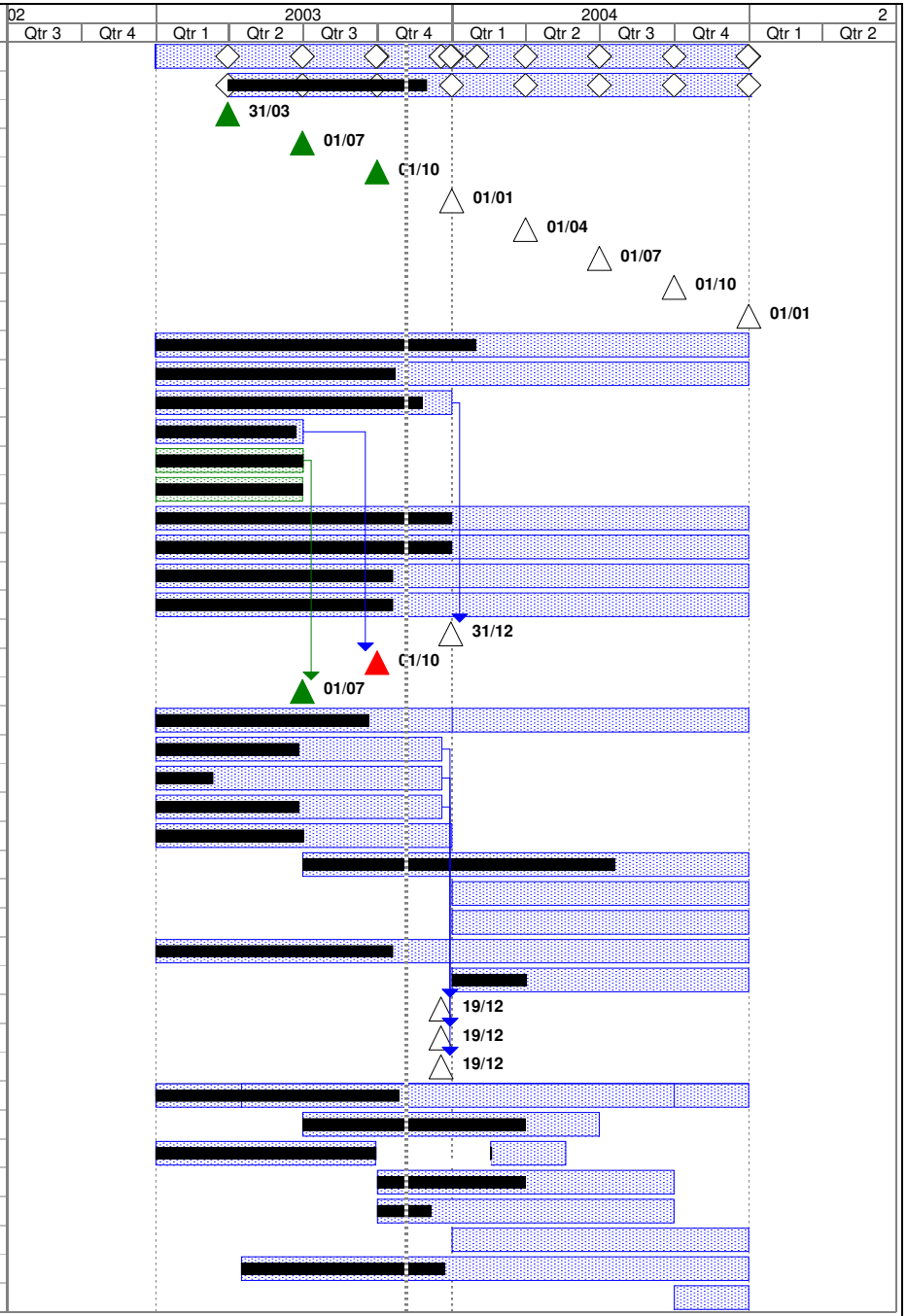
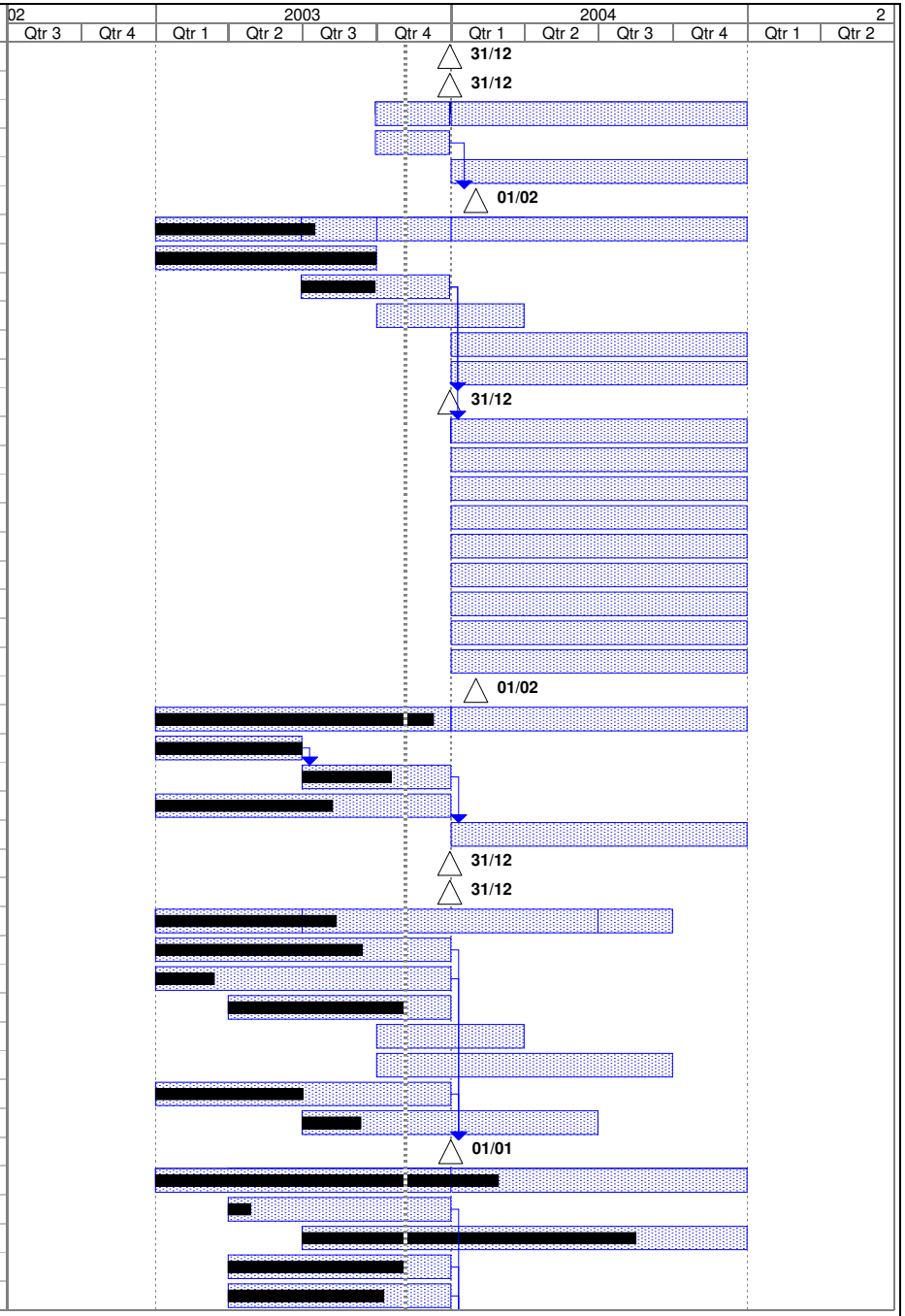
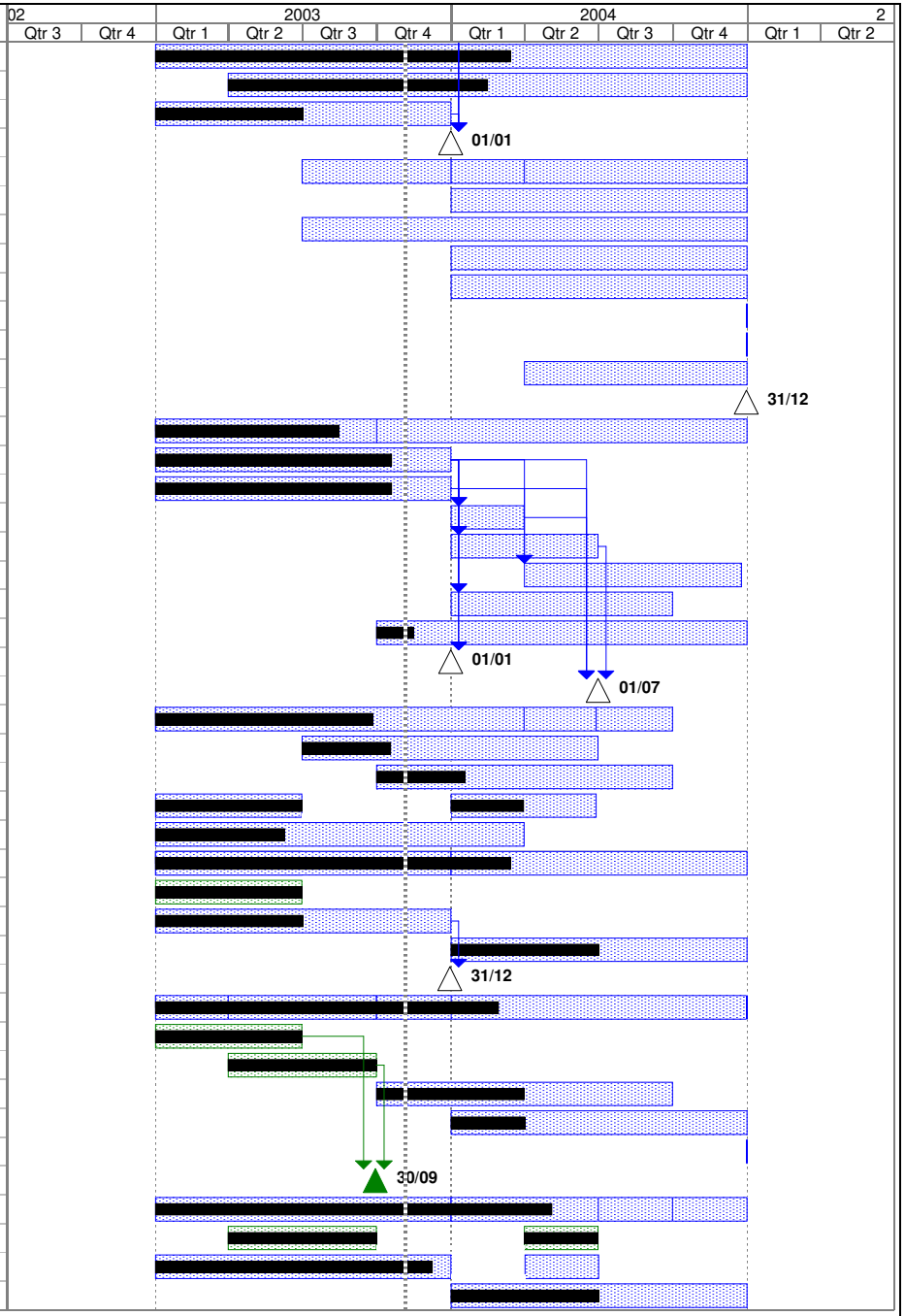
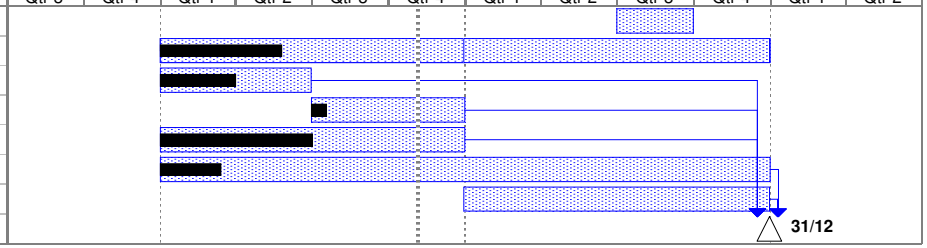
| ID | WP | Task Name | Start | Finish | % Comp. |
|---|---|---|---|---|---|
| 0 | | **vdfs_prog_20030603** | ########## | ########## | **36%** |
| 1 | | **Quarterly Reviews** | **Mon 31/03/03** | **Mon 03/01/05** | **38%** |
| 2 | | Quarterly Review | Mon 31/03/03 | Mon 31/03/03 | 100% |
| 3 | | Quarterly Review | Tue 01/07/03 | Tue 01/07/03 | 100% |
| 4 | | Quarterly Review | Wed 01/10/03 | Wed 01/10/03 | 100% |
| 5 | | Quarterly Review | Thu 01/01/04 | Thu 01/01/04 | 0% |
| 6 | | Quarterly Review | Thu 01/04/04 | Thu 01/04/04 | 0% |
| 7 | | Quarterly Review | Thu 01/07/04 | Thu 01/07/04 | 0% |
| 8 | | Quarterly Review | Fri 01/10/04 | Fri 01/10/04 | 0% |
| 9 | | Quarterly Review | Sat 01/01/05 | Mon 03/01/05 | 0% |
| 10 | **1** | **Management and Defenition of Responsibilities** | **Wed 01/01/03** | **Fri 31/12/04** | **54%** |
| 11 | 1.1 | Report to VISTA, UKIDSS, JAC, ATC, WFAP, GSC | Wed 01/01/03 | Fri 31/12/04 | 40% |
| 12 | 1.2 | Interface Control Document between CASU and JAC | Wed 01/01/03 | Wed 31/12/03 | 90% |
| 13 | 1.3 | Interface Control Document between CASU and WFAU | Wed 01/01/03 | Tue 01/07/03 | 95% |
| 14 | 1.4 | Define data structures and FITS headers | Wed 01/01/03 | Tue 01/07/03 | 100% |
| 15 | 1.5 | Define observing protocols | Wed 01/01/03 | Mon 30/06/03 | 100% |
| 16 | 1.6 | Liaise with UKIDSS and JAC on observing strategy | Wed 01/01/03 | Fri 31/12/04 | 50% |
| 17 | 1.7 | Liaise with UKIDSS and JAC on survey planning | Wed 01/01/03 | Fri 31/12/04 | 50% |
| 18 | 1.8 | Liaise with UKIDSS and JAC on survey progress database | Wed 01/01/03 | Fri 31/12/04 | 40% |
| 19 | 1.9 | System Documentation | Wed 01/01/03 | Fri 31/12/04 | 40% |
| 20 | D1a | ICD between CASU and JAC | Wed 31/12/03 | Wed 31/12/03 | 0% |
| 21 | D1b | ICD between CASU and WFAU | Wed 01/10/03 | Wed 01/10/03 | 0% |
| 22 | D1c | Fits headers and data structures defention document | Tue 01/07/03 | Tue 01/07/03 | 0% |
| 23 | **2** | **ESO VISTA software deliverables and documentation** | **Wed 01/01/03** | **Fri 31/12/04** | **36%** |
| 24 | 2.1 | DFS user requirements document | Wed 01/01/03 | Fri 19/12/03 | 50% |
| 25 | 2.2 | Data reduction specification | Wed 01/01/03 | Fri 19/12/03 | 20% |
| 26 | 2.3 | Calibration plan document for ESO | Wed 01/01/03 | Fri 19/12/03 | 50% |
| 27 | 2.4 | Specification of calibration procedures for ESO | Wed 01/01/03 | Wed 31/12/03 | 50% |
| 28 | 2.5 | Interface Control Document ESO/VPO | Tue 01/07/03 | Fri 31/12/04 | 70% |
| 29 | 2.6 | Instrument specification and interface documents | Thu 01/01/04 | Fri 31/12/04 | 0% |
| 30 | 2.7 | Delivery software modules and ETC | Thu 01/01/04 | Fri 31/12/04 | 0% |
| 31 | 2.8 | Liaise with VISTA IR camera development team | Wed 01/01/03 | Fri 31/12/04 | 40% |
| 32 | 2.9 | Development of DQC measures | Thu 01/01/04 | Fri 31/12/04 | 25% |
| 33 | D2a | Calibration plan document | Fri 19/12/03 | Fri 19/12/03 | 0% |
| 34 | D2b | | Fri 19/12/03 | Fri 19/12/03 | 0% |
| 35 | D2c | DFS user requirements document | Fri 19/12/03 | Fri 19/12/03 | 0% |
| 36 | **3** | **Pipeline Infrastructure and Progress Monitoring Tools** | **Wed 01/01/03** | **Fri 31/12/04** | **41%** |
| 37 | 3.1 | Interactive tools for running pipeline | Tue 01/07/03 | Wed 30/06/04 | 75% |
| 38 | 3.2 | High level scripts to interrogate headers | Wed 01/01/03 | Thu 20/05/04 | 75% |
| 39 | 3.3 | Develop automatic progression of results to WWW pages | Wed 01/10/03 | Thu 30/09/04 | 50% |
| 40 | 3.4 | Automate checks to spot failures of pipeline | Wed 01/10/03 | Thu 30/09/04 | 18% |
| 41 | 3.5 | Tools for fixing problem datasets | Thu 01/01/04 | Fri 31/12/04 | 0% |
| 42 | 3.6 | Group documentation for above | Wed 16/04/03 | Fri 31/12/04 | 40% |
| 43 | 3.7 | Reprocessing after bug fixes or improvements to algorithms | Fri 01/10/04 | Fri 31/12/04 | 0% |



| ID | WP | Task Name | Start | Finish | % Comp. |
|---|---|---|---|---|---|
| 44 | D3a | Deliver pipeline V1.0 | Wed 31/12/03 | Wed 31/12/03 | 0% |
| 45 | D3b | Deliver documentation for pipeline V1.0 | Wed 31/12/03 | Wed 31/12/03 | 0% |
| 46 | **4** | **Set up and Manage Raw Science Archive** | **Tue 30/09/03** | **Fri 31/12/04** | **0%** |
| 47 | 4.1 | Extend current UKIRT archive to cope with WFCAM | Tue 30/09/03 | Tue 30/12/03 | 0% |
| 48 | 4.2 | Ingest and verify WFCAM data | Thu 01/01/04 | Fri 31/12/04 | 0% |
| 49 | D4a | Create Raw Science Archive | Sun 01/02/04 | Mon 02/02/04 | 0% |
| 50 | **5** | **Set up and Manage Data Processing System Hardware** | **Wed 01/01/03** | **Fri 31/12/04** | **27%** |
| 51 | 5.1 | Investigate alternatives (benchmarking, reliability etc) | Wed 01/01/03 | Tue 30/09/03 | 100% |
| 52 | 5.2 | Buy hardware and install software | Mon 30/06/03 | Tue 30/12/03 | 50% |
| 53 | 5.3 | Integration and testing | Wed 01/10/03 | Wed 31/03/04 | 0% |
| 54 | 5.4 | Manage day-to-day, maintenance and upgrades | Thu 01/01/04 | Fri 31/12/04 | 0% |
| 55 | 5.5 | Hardware additions for further data processing system | Thu 01/01/04 | Fri 31/12/04 | 0% |
| 56 | D5a | Processing hardware in place | Wed 31/12/03 | Wed 31/12/03 | 0% |
| 57 | **6** | **Run Standard Pipeline** | **Thu 01/01/04** | **Fri 31/12/04** | **0%** |
| 58 | 6.1 | Ingest and verify data | Thu 01/01/04 | Fri 31/12/04 | 0% |
| 59 | 6.2 | Update master calibration frames | Thu 01/01/04 | Fri 31/12/04 | 0% |
| 60 | 6.3 | Monitor detector performance | Thu 01/01/04 | Fri 31/12/04 | 0% |
| 61 | 6.4 | Oversee standd processing | Thu 01/01/04 | Fri 31/12/04 | 0% |
| 62 | 6.5 | Astrometric calibration | Thu 01/01/04 | Fri 31/12/04 | 0% |
| 63 | 6.6 | Photometric calibration | Thu 01/01/04 | Fri 31/12/04 | 0% |
| 64 | 6.7 | Verify science products and monitor DQC measures | Thu 01/01/04 | Fri 31/12/04 | 0% |
| 65 | 6.8 | Monitor product data transfer to WFAU | Thu 01/01/04 | Fri 31/12/04 | 0% |
| 66 | D6a | Data flow to WFAU initiated | Sun 01/02/04 | Mon 02/02/04 | 0% |
| 67 | **7** | **Development Work for Summit Pipeline** | **Wed 01/01/03** | **Fri 31/12/04** | **47%** |
| 68 | 7.1 | Interface test pipelines to ORAC-DR | Wed 01/01/03 | Mon 30/06/03 | 100% |
| 69 | 7.2 | Implement WFCAM pipeline at summit | Tue 01/07/03 | Wed 31/12/03 | 60% |
| 70 | 7.3 | Documentation of interface | Wed 01/01/03 | Wed 31/12/03 | 60% |
| 71 | 7.4 | Upgrade and maintain summit pipeline | Thu 01/01/04 | Fri 31/12/04 | 0% |
| 72 | D7a | Deliver summit pipeline | Wed 31/12/03 | Wed 31/12/03 | 0% |
| 73 | D7b | Deliver summit pipeline documentation | Wed 31/12/03 | Wed 31/12/03 | 0% |
| 74 | **8** | **Development and Testing of Standard 2D Processing** | **Wed 01/01/03** | **Thu 30/09/04** | **35%** |
| 75 | 8.1 | Further development of standard pipeline | Wed 01/01/03 | Wed 31/12/03 | 70% |
| 76 | 8.2 | Liaison with WFCAM development team | Wed 01/01/03 | Wed 31/12/03 | 20% |
| 77 | 8.3 | Partake in planning commissioning observations | Tue 01/04/03 | Wed 31/12/03 | 80% |
| 78 | 8.4 | Participate directly in commissioning | Wed 01/10/03 | Wed 31/03/04 | 0% |
| 79 | 8.5 | Tuning pipeline during commissioning and after | Wed 01/10/03 | Thu 30/09/04 | 0% |
| 80 | 8.6 | Documentation of 2Dprocessing software | Wed 01/01/03 | Wed 31/12/03 | 50% |
| 81 | 8.7 | Comparison between automated and manual datasets | Tue 01/07/03 | Wed 30/06/04 | 20% |
| 82 | D8a | Complete 2D processing modules V1.0 | Thu 01/01/04 | Thu 01/01/04 | 0% |
| 83 | **9** | **Development and Testing of Standard Catalogue Products** | **Wed 01/01/03** | **Fri 31/12/04** | **58%** |
| 84 | 9.1 | Add in new measures requested | Tue 01/04/03 | Wed 31/12/03 | 10% |
| 85 | 9.2 | Refine astrometric calibration model | Tue 01/07/03 | Fri 31/12/04 | 75% |
| 86 | 9.3 | Generate simulations of expected data | Tue 01/04/03 | Wed 31/12/03 | 80% |
| 87 | 9.4 | Assess catalogue parameter reliability | Tue 01/04/03 | Wed 31/12/03 | 70% |



| ID | WP | Task Name | Start | Finish | % Comp. |
|---|---|---|---|---|---|
| 88 | 9.5 | Intercomparison of catalogue products with other packages | Wed 01/01/03 | Fri 31/12/04 | 60% |
| 89 | 9.6 | Completeness and error estimates | Tue 01/04/03 | Fri 31/12/04 | 50% |
| 90 | 9.7 | Documentation of catalogue software and products | Wed 01/01/03 | Wed 31/12/03 | 50% |
| 91 | D9a | Complete standard catalogue modules V1.0 | Thu 01/01/04 | Thu 01/01/04 | 0% |
| 92 | **10** | **Set Up, Trial and Run Further Processing Software** | **Tue 01/07/03** | **Fri 31/12/04** | **0%** |
| 93 | 10.1 | Manage and run further processing stages | Thu 01/01/04 | Fri 31/12/04 | 0% |
| 94 | 10.2 | Development and assessment of PSF options 1,2 | Tue 01/07/03 | Fri 31/12/04 | 0% |
| 95 | 10.3 | Develop 1D/2D PSF-deconvolved Sersic profile fits | Thu 01/01/04 | Fri 31/12/04 | 0% |
| 96 | 10.4 | Develop LSBG/nebulosity detection/parameterisation | Thu 01/01/04 | Fri 31/12/04 | 0% |
| 97 | 10.5 | Full iterative profile fitting for stellar images | Fri 31/12/04 | Fri 31/12/04 | 0% |
| 98 | 10.6 | Develop and optimise Bayesian image classification | Fri 31/12/04 | Fri 31/12/04 | 0% |
| 99 | 10.7 | Modelling and simulations of further processing steps | Thu 01/04/04 | Fri 31/12/04 | 0% |
| 100 | D10a | Deliver 2D PSF and Sersic fitting applications | Fri 31/12/04 | Fri 31/12/04 | 0% |
| 101 | **11** | **Photometric Standards and Calibraion** | **Wed 01/01/03** | **Fri 31/12/04** | **31%** |
| 102 | 11.1 | Agree on primary standards | Wed 01/01/03 | Wed 31/12/03 | 80% |
| 103 | 11.2 | Choose secondary standard fields | Wed 01/01/03 | Wed 31/12/03 | 80% |
| 104 | 11.3 | Take part in comissioning observations | Thu 01/01/04 | Wed 31/03/04 | 0% |
| 105 | 11.4 | Reduce data, compute zero points and colour equations | Thu 01/01/04 | Wed 30/06/04 | 0% |
| 106 | 11.5 | Update maintain and extend secondary standards system | Thu 01/04/04 | Fri 24/12/04 | 0% |
| 107 | 11.6 | Investigate photometric calibration field systematics | Thu 01/01/04 | Thu 30/09/04 | 0% |
| 108 | 11.7 | Assess extinction monitoring methods | Wed 01/10/03 | Fri 31/12/04 | 10% |
| 109 | D11a | Allocate primary and secondary standard stars/fields | Thu 01/01/04 | Thu 01/07/04 | 0% |
| 110 | D11b | Photometric calibration and colour equations | Thu 01/07/04 | Thu 01/07/04 | 0% |
| 111 | **12** | **Further Development of DQC Measures** | **Wed 01/01/03** | **Thu 30/09/04** | **42%** |
| 112 | 12.1 | Develop extra systematic noise measures | Tue 01/07/03 | Wed 30/06/04 | 30% |
| 113 | 12.2 | Refine curent measures for WFCAM/VISTA data | Wed 01/10/03 | Thu 30/09/04 | 30% |
| 114 | 12.3 | Implement 2MASS -c.f. for throughput measures | Wed 01/01/03 | Mon 28/06/04 | 75% |
| 115 | 12.4 | Master calibration frames for detector monitoring | Wed 01/01/03 | Wed 31/03/04 | 35% |
| 116 | **13** | **Co-located List Driven Photometry** | **Wed 01/01/03** | **Fri 31/12/04** | **60%** |
| 117 | 13.1 | Test methods for master catalogue generation | Wed 01/01/03 | Mon 30/06/03 | 100% |
| 118 | 13.2 | Develop basic WCS-based list driven photometer | Wed 01/01/03 | Wed 31/12/03 | 50% |
| 119 | 13.3 | Externally driven WCS photometry and define parameter set | Thu 01/01/04 | Fri 31/12/04 | 50% |
| 120 | D13a | Deliver list driven photometer | Wed 31/12/03 | Wed 31/12/03 | 0% |
| 121 | **14** | **Stacking and Mosaicing** | **Wed 01/01/03** | **Fri 31/12/04** | **58%** |
| 122 | 14.1 | Develop benchmark simple stacking/mosaicing framework | Wed 01/01/03 | Mon 30/06/03 | 100% |
| 123 | 14.2 | Nearest neighbour algorithm | Tue 01/04/03 | Tue 30/09/03 | 100% |
| 124 | 14.3 | More sophisticated rejection dealing with pixellation | Wed 01/10/03 | Thu 30/09/04 | 50% |
| 125 | 14.4 | Stacking with optimum weighting and defect rejection | Thu 01/01/04 | Fri 31/12/04 | 25% |
| 126 | 14.5 | Advanced stacking/image restoration for variable PSF | Fri 31/12/04 | Fri 31/12/04 | 0% |
| 127 | D14 | Deliver basic stacker and mosaicer | Tue 30/09/03 | Tue 30/09/03 | 100% |
| 128 | **15** | **Continuum Subtraction and Basic Difference Imaging** | **Wed 01/01/03** | **Fri 31/12/04** | **67%** |
| 129 | 15.1 | Simple WCS-based subtraction techniques | Tue 01/04/03 | Wed 30/06/04 | 100% |
| 130 | 15.2 | Investigate and apply different interpolation methods | Wed 01/01/03 | Thu 01/07/04 | 75% |
| 131 | 15.3 | Develop adaptive kernel matching option | Thu 01/01/04 | Fri 31/12/04 | 50% |



| ID | WP | Task Name | Start | Finish | % Comp. |
|---|---|---|---|---|---|
| 132 | 15.4 | Transient event detection | Thu 01/07/04 | Thu 30/09/04 | 0% |
| 133 | **16** | **Interpolation Techniques and PSF Modelling** | **Wed 01/01/03** | **Fri 31/12/04** | **20%** |
| 134 | 16.1 | Investigate alternative interpolation/PSF schemes | Wed 01/01/03 | Mon 30/06/03 | 50% |
| 135 | 16.2 | Implications for different stacking methods | Tue 01/07/03 | Wed 31/12/03 | 10% |
| 136 | 16.3 | Implications for deriving catalogues and parameters | Wed 01/01/03 | Wed 31/12/03 | 50% |
| 137 | 16.4 | Oversampled PSF generation per detector | Wed 01/01/03 | Fri 31/12/04 | 10% |
| 138 | 16.5 | Develop oversampled spatially varying PSF model | Wed 31/12/03 | Thu 30/12/04 | 0% |
| 139 | D16a | Deliver PSF photometer | Fri 31/12/04 | Fri 31/12/04 | 0% |